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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/629,110	07/29/2003	Rory L. Block	1842.224US1	6981	
	SCHWEGMAN, LUNDBERG & WOESSNER/WMS GAMING P.O. BOX 2938			EXAMINER	
P.O. BOX 2938				D AGOSTINO, PAUL ANTHONY	
MINNEAPOLI	MINNEAPOLIS, MN 55402		ART UNIT	PAPER NUMBER	
			3714		
			NOTIFICATION DATE	DELIVERY MODE	
			12/29/2000	EL ECTRONIC	

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/629,110 Filing Date: July 29, 2003 Appellant(s): BLOCK ET AL.

> Mr. John Fischer For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/1/2009 appealing from the Office action mailed 12/30/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

Claims 1-11, 15-16 and 18 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Acres (U.S. Patent 6,319,125).

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

Claims 1-11, 15-16 and 18 were rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6.319.125 to Acres.

(7) Claims Appendix

A substantially correct copy of appealed claim 7 appears on page 24 of the Appendix to the appellant's brief. The minor errors are as follows: Claim 7 should depend from Claim 6 and read as follows:

Claim 7. The method of Claim 6, further comprising identifying, using the second event message, the gaming terminal that generated the primary event message.

(8) Evidence Relied Upon

6,319,125	Acres	11-2001
6 280 382	Bowman-Amuah	9-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

Claims 1-11, 15-16, and 18 are rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 6,319,125 to Acres (Acres).

In Reference to Claims 1, 6, 8-9, 15-16, and 18

Acres discloses a system and method of communication in a gaming network (Fig. 5 "bonusing promotion system" 350 with "bonus server" 351 also referred to as "bonus server" 370 in Figs. 31-35) having a central server linked to a plurality of gaming terminals ("bonus promotion system 350 includes a bonus server 351 which is the central control point for each of the bonus promotions" Col. 17 Lines 20-21 and "the

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bonus promotion system uses a bonus server interconnected to a plurality of gaming devices" Col. 1 Lines 18-19), the method comprising:

receiving a primary {one or more} event message{s} {"the individual components of system 350 communicate with the bonus server 351 (370 in Fig. 35) via messages exchanged as data packages." Col. 27 Lines 25-27; see also array of alphabetically lettered messages of Figs. 31-34, labelled A through R, that move bi-directionally from bonus server 370 to other servers such as the DACOM and Bank Controller) in a routing queue of the central server {in the central server} from one of the plurality of gaming terminals (Fig. 31 messages received at the bonus server 370 from the MCl in each gaming terminal; See Fig. 35 which provides the details inside bonus server 370 of main routing queue 372);

identifying, comprising determining an event type associated with the message, and a queue identifier ("FIG. 31 shows a functional block diagram of the data flow and packet format table for the bonus server 351 of FIG. 5 in conducting the cash bonus 307 operating on the system of FIG. 5. Each unidirectional connection in the functional block diagram is labeled with one or more alphabetic characters corresponding to a row in the packet format table. The packet's type [sic, of event], source [sic, machine or location], and destination [sic, queue identifier], name and description are set forth in each column of the packet format table." (Col. 27 Lines 53-60), using an association data structure ("packet format table" Col. 27 Lines 53-60 is the data structure which associates configuration particulars and routing information into each packet format table, akin to Appellant's "routing tables" Specification page 13) for a given bonus

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promotion, namely: "Cash Bonus" (Col. 27 Line 52), "Mystery Bonus" (Col. 28 Line 61, "Progressive Bonus" (Col. 29 Line 43), or "Multiple Jackpot" (Col. 30 Line 27);

a first {at least one, a plurality of} application queue{s} associated with a first {second, one or more} application (first queue 372 of RRM 373 routes messages to the appropriate queues, namely: the CSM 380, BCM 378, and MCM 376 event manager servers via respective message queues 375, 377, and 379 (Col. 31 Lines 1-59) configured to process {to receive} the primary {secondary, received one or more} event message{s} {in each respective application queue} using {the central server including} (Fig. 35 depicts the processing of the event messages of Figs. 31-34 wherein "Each gaming device 300 can participate in a number of bonus promotions, each of which is controlled by a separate bonus server 370. (Col. 49-51) using a message oriented middleware (Fig. 24 showing the "software structure" wherein "a central message engine 156 which implements all of the "intelligence" (emphasis in original) of the interactions between modules" (Col. 50 Lines 40-63) and Figs. 25-28 and Cols. 51-54 for other systems and modules):

an association data structure using a relational database ("configuration workstation" 359 serves as the relational database with user interface providing input fields of Figs. 2A through 2N wherein "The configuration workstation 359 is used to monitor, configure, and modify bonus parameters on the bonus server 351. Figs. 2A through 2N show screen images for configuring the bonus promotions of the present invention using the configuration workstation 359" (Col. 18 Lines 13-18). The configuration parameters are used by each system and subsystem of Figs. 31-35 to

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generate and receive "configuration bonus messages" where "Each bonus server 370 communicates to the gaming devices ... using bonus configuration messages" (Col. 28 Lines 49-60) based on a data stored in the relational database. For example, the relational database stores gaming machine data (Fig. 2L "Floor Locations in Bonus" "2 Machines in Bonus") identified by respective addresses in the bonus configuration message ("a routing and identification header 192" (Col. 44 Lines 18-21; see also Fig. 22) to route the messages to the appropriate Bonus Server 351 (Col. 31 Lines 18-19) and "to the appropriate event manager" on the each server (Fig. 36 steps 373-394 and (Col. 32 Lines 1-4)) through their respective queues ("Fig. 35 "queues" CSM, BCM, and MCM). The relational database provides the information needed to deliver and receive the various types of messages according to the "packet format tables" disclosed in Figs. 31-34. For example, Fig. 31 requires information from the relational database for the bonus server to send messages "B, C, D, G, H, I, K, M, N, O, P, and R" to and receive messages "A, L, Q, J" from Concentrator 352 for conducting the "Cash Bonus" promotion. A sampling of the contents of the lettered message types is provided (Col.s. 27-28) for the Cash Bonus as to all the lettered communications of Fig. 31. For example. "The bonus server 370 also sends a before bonus notify message E to the DACOM host 354 for reporting the location of the winning gaming device 300 and related accounting information, a bonus pay message G to the winning MCI 356 and a consolation message H to the remaining MCIs 356. Upon the awarding of the cash bonus 307, the bonus server 370 broadcasts a start celebration message I and a start anticipation message I1 respectively to the music system 358 and bank controller 355

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group for controlling the celebration music. The DACOM host 354 maintains historical data regarding the bonuses paid." (Col. 28 Lines 28-40). The relational database of Acres supports the generation of bonus configuration messages grouped by the packet format table data association structure for identifying and routing systems communications to the appropriate server queues);

storing an association of the primary event message to at least {one} the first {second} application queue{s} (Col. 31 Lines 13-15 wherein the RRM 373 is configured to control the interfacing of the bonus server with the other event managers); and

transmitting the received primary event message to the identified first {at least one} application queue (Col. 31 Lines 13-59) for processing (Fig. 35 discloses the claimed message processing; see also Col. 31 Lines 13-59).

In Reference to Claim 2

Acres discloses retrieving the primary event message from the first application queue with the first application and processing the primary event message with the first application (Figs. 35 and 37-40 wherein in the case of the CSM of Fig. 38 "During each iteration of the loop (blocks 412-417), the routine waits for a message queue event to occur, that is, a new message arriving in the message queue 379 (block 412). If the message queue event is a configuration message (block 413), the routine reads the message queue 379 (block 414) and processes the message (block 415)." Col. 32 Lines 25-31; see also Col. 32 Lines 59-65; and Col. 33 Lines 26-33).

In Reference to Claim 3

Acres discloses generating a secondary event message from the processing of the primary event message (Fig. 31 wherein as a result of primary messages in the queue regarding the status of the cash pool, "When the bonus pool 304 substantially equals the cash bonus 307, a sequence of data packets is exchanged as follows." Col. 28 Lines 16-18; hence, a plurality of secondary messages are exchanged (Col. 28 Lines 16-48 and Fig. 31 letters A-R);

transmitting the secondary event message to the routing queue of the central sever (Col. 28 Lines 16-48);

identifying, a second application queue associated with a second application configured to process the secondary event message using the association data structure, the association data structure storing an association of the secondary event message to the second application queue; and transmitting the secondary event message to the identified second application queue (See rejection of Claim 1).

In Reference to Claim 4

Applicant claims further including executing the first application on a secondary server in communication with the central server (Examiner reasonably interprets this claim to mean a) a message moving from one server and then to another server, and/or b) a message is sent to two servers. In either case, Acres discloses both. In the first instance, Acres discloses that "each gaming device 300 can participate in a number of bonus promotions, each of which is controlled by a separate bonus server 370 (Col. 28 Lines 49-51) wherein "Fig. 5 shows a functional block diagram of a bonus promotion system 350 according to the present invention. The system 350 includes a bonus

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server 351 which is the central control point for each of the bonus promotions except the multiple jackpot 310. The bonus server 351 tracks cash-in for the bonus pool 304 and hidden pool 306 and determines the appropriate time at which to award each bonus prize. In the described embodiment, a single bonus server 351 controls all progressive iackpots 309. Second and third bonus servers 351 respectively control the car mystery and cash mystery variants of the participation bonuses 308. A fourth bonus server 351 controls the cash bonus 307. Since the multiple jackpot 310 is initiated at random times by insertion of a special card in a bank controller 355, no bonus server 351 is dedicated to controlling the multiple jackpot 310." Col. 17 Lines 18-33). Thus, a message can be generated indicating participation in, for example the "Cash Bonus" and the "Mystery Bonus" such that a message is routed to both bonus servers. In the second instance, Acres discloses a number of event manager servers (Fig. 35) constituting the Bonus Server. Messages are first executed by the RMM application and then routed to the MCM, BCM, and CSM secondary application servers in communication with the central bonus server (Fig. 35). In either instance, Acres discloses executing the first application on a secondary server in communication with the central server.

In Reference to Claim 5

See rejection of claims 1-4.

In Reference to Claim 7

Acres discloses identifying, using the second event message, the gaming terminal that generated the primary event message (when awarding a cash prize, the

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updated meter data (second event message) indicates which game machines 300 are eligible for a cash award (primary event message). Bonus server 370 then indicates which one is the winner from those eligible (Col. 28 Lines 16-48).

In Reference to Claim 10

See rejection of claims 1 and 3.

In Reference to Claim 11

Acres discloses message queuing and a store-and-forward mechanism (Acres discloses a store and forward mechanism wherein the MCI in the gaming machine "MCI forwards the record to the front end system (DACOM host), via the rest of bonusing promotion system. If the link is down (i.e. the MCI does not receive an acknowledgment for a PTR it has transmitted), the record is gueued in the MCI's battery backed up memory and is sent whenever the link comes back up." (Col. 50 Lines 5-20). Additionally, "each bonus server 351 is implemented as an IBM compatible personal computer having an Intel TM "PENTIUM" compatible microprocessor ... Each bonus server is configured with both primary and secondary non-volatile random access memory (NVRAM) for storage of bonusing data. ... Two megabytes of static RAM is required, and PC-card based hard disks can be used to increase storage capacity" (Col. 18 Lines 20-31). Thus, the queues of Fig. 35 are reasonably assumed to be persistent memory. Further, "messages are received temporarily by the RRM 373 and sent to other event managers" (Col. 31 Lines 13-59) wherein, for example, "RRM 373 controls the interfacing of the bonus server 370 over the network to the remainder of the bonus promotion system 350. RRM 373 sends and

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receives data packets over the network via a socket connection 371. Incoming data packets are temporarily stored in a message queue 372. ... the data packet is initially placed in the message queue 372 by the socket connection 371 and subsequently forwarded by RRM 373 to a packet decode module 374." (Col. 31 Lines 13-27).

Claim Rejections - 35 USC § 103

Claims 12-14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,319,125 to Acres (Acres) in view of U.S. Patent No. 6,289,382 to Bowman-Amuah (Bowman-Amuah).

In Reference to Claims 12, 14 and 17

Acres discloses a system substantially equivalent to Appellant's claimed invention wherein Acres discloses that messages are prioritized by the MCI (Col. 48 Lines 48-56) but fails to explicitly disclose wherein messages in the queue are prioritized to guarantee adequate response time for a critical application at the expense of a less important application; and wherein a standardized interface language includes an extensible markup language (XML).

Bowman-Amuah teaches of prioritizing messages in message queues as to routing (Col. 84 Lines 31-37), prioritizing data traffic (Col. 88 Lines 1-3), data prioritization ("various network components can be configured to prioritize their handling of specified types of traffic" with improved network performance but no guarantee or at the expense of the quality of service (Col. 89 Lines 13-29). To ensure reliable queuing wherein "Both the application and the administrator can control the order of the messages (service requests) in the queue. Messages can be ordered LIFO, FIFO, time

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based, priority, or by some other combination of these keys." Col. 93 Lines 48-55) in order to optimize performance (i.a., delay, reliability) (Col. 84 Lines 31-37).

Separately, Bowman-Amuah teaches of using XML (Col. 41 Lines 1-40) in order to allow authors to create their own customized tags to identify different types of data on their web pages (Col. 41 Lines 10-12) and more effectively index and search for information in databases (Col. 41 Lines 13-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the prioritization and XML language as taught by Bowman-Amuah into the teachings of Acres in order to ensure reliable queueing and optimize performance and to allow authors to identify different types of data on their web pages and more effectively index and search for information in databases, respectively.

In Reference to Claim 13

Acres as modified by Bowman-Amuah discloses the primary event language is formatted using a standardized interface language ("FIG. 35 shows a method for controlling a bonus promotion according to the present invention using the bonus server 370 of FIG. 5. In the described embodiment, the method is embodied as a computer program implemented in the C programming language, although other computer languages are equally suitable." Col. 30 Lines 65-67 and Col. 31 Lines 1-5).

(10) Response to Arguments

Appellant's arguments filed 6/1/2009 have been fully considered but they are not 1. persuasive. Appellant argues (see Appellant's Appeal Brief pages 15-17) that Acres fails to disclose using an association data structure based on a relational database to identify a first application queue associated with a first application configured to process the primary event message. Examiner respectfully disagrees. Contrary to Appellant's assertion that Acres refers generally to routing messages. Acres discloses a "packet format table" association structure (FIG. 31) wherein "Each unidirectional connection in the functional block diagram is labeled with one or more alphabetic characters corresponding to a row in the packet format table. The packet's type [sic, of event], source [sic, machine or location], and destination [sic, queue identifier], name and description are set forth in each column of the packet format table." (Col. 27 Lines 53-60). The packet format tables are association data structures wherein, according to Applicant, the association data structure comprises "routing tables" which "store configuration information relating to event messages and the application message queues to which they are routed" (Applicant's Specification, page 13).

Acres also discloses a configuration workstation relational database 359 which receives configuration information via user interfaces (Figs. 2A through 2N; wherein "The configuration workstation 359 is used to monitor, configure, and modify bonus parameters on the bonus server 351. Figs. 2A through 2N show screen images for configuring the bonus promotions of the present invention using the configuration

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workstation 359" (Col. 18 Lines 13-18). The configuration parameters are used by each system and subsystem of Figs. 31-35 to generate and receive "configuration bonus messages" where "Each bonus server 370 communicates to the gaming devices ... using bonus configuration messages" (Col. 28 Lines 49-60) based on a data stored in the relational database to include ("a routing and identification header 192" (Col. 44 Lines 18-21; see also Fig. 22) to route the messages to the appropriate Bonus Server 351 (Col. 31 Lines 18-19) and "to the appropriate event manager" on the each server (Fig. 36 steps 373-394 and (Col. 32 Lines 1-4)) through their respective queues ("Fig. 35 "queues" CSM, BCM, and MCM). The relational database provides the information needed to deliver and receive the various types of messages according to the "packet format tables" disclosed in Figs. 31-34. For example, Fig. 31 requires information from the relational database for the bonus server to send messages "B, C, D, G, H, I, K, M, N, O, P, and R" to and receive messages "A, L, Q, J" from Concentrator 352 for conducting the "Cash Bonus" promotion. A sampling of the contents of the lettered message types is provided (Cols. 27-28) for the Cash Bonus as to all the lettered communications of Fig. 31. Lastly, historical information is stored in the DACOM (Col. 28 Lines 28-40). Thus, Acres discloses a relational database to include tracking configuration data necessary to support the generation of bonus configuration messages grouped by the packet format table data association structure for identifying and routing systems communications to the appropriate server queues.):

 Appellant argues (see Appellant's Appeal Brief page 17) that Examiner's productby-process analysis is improper. Examiner concurs and has withdrawn the rejection.

3. Appellant argues (see Appellant's Appeal Brief pages 18-19) with respect to Claim 4, that Acres fails to execute the first application on a secondary server in communication with the second server. Examiner respectfully disagrees. Applicant claims:

"The method of claim 2, further including executing the first application on a secondary server in communication with the central server.

Examiner reasonably interprets this claim to mean a) a message moving from one server and then to another server, and/or b) a message is sent to two servers. In either case, Acres discloses both.

In the first instance, Acres discloses that "each gaming device 300 can participate in a number of bonus promotions, each of which is controlled by a separate bonus server 370 (Col. 28 Lines 49-51) wherein "Fig. 5 shows a functional block diagram of a bonus promotion system 350 according to the present invention. The system 350 includes a bonus server 351 which is the central control point for each of the bonus promotions except the multiple jackpot 310. The bonus server 351 tracks cash-in for the bonus pool 304 and hidden pool 306 and determines the appropriate time at which to award each bonus prize. In the described embodiment, a single bonus server 351 controls all progressive jackpots 309. Second and third bonus servers 351 respectively control the car mystery and cash mystery variants of the participation bonuses 308. A fourth bonus server 351 controls the cash bonus 307. Since the multiple jackpot 310 is initiated at random times by insertion of a special card in a bank controller 355, no bonus server 351 is dedicated to controlling the multiple jackpot 310."

Col. 17 Lines 18-33). Thus, a message can be generated indicating participation in, for example the "Cash Bonus" and the "Mystery Bonus" such that a message is routed to both bonus servers.

In the second instance, Acres discloses a number of event manager servers (Fig. 35) constituting the Bonus Server. Messages are first executed by the RMM application and then routed to the MCM, BCM, and CSM secondary application servers in communication with the central bonus server (Fig. 35).

In either instance, Acres discloses executing the first application on a secondary server in communication with the central server.

Conversely, Appellant argues that there is no disclosure of messages received at one bonus server and then forwarding the message to another bonus server and of using an external queuing mechanism to provide for distribution of services across several machines. Examiner contends Appellant is arguing features which are not recited in the claims.

4. Appellant argues (see Appellant's Appeal Brief pages 19-20) with respect to Claim 11, that Acres fails to include a store-and-forward mechanism. Examiner respectfully disagrees. Acres discloses a store and forward mechanism wherein the MCI in the gaming machine "MCI forwards the record to the front end system (DACOM host), via the rest of bonusing promotion system. If the link is down (i.e. the MCI does not receive an acknowledgment for a PTR it has transmitted), the record is queued in the MCI's battery backed up memory and is sent whenever the link comes back up." (Col. 50 Lines 5-20). Additionally, "each bonus server 351 is implemented as an

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IBM compatible personal computer having an Intel TM "PENTIUM" compatible microprocessor ... Each bonus server is configured with both primary and secondary non-volatile random access memory (NVRAM) for storage of bonusing data. ... Two megabytes of static RAM is required, and PC-card based hard disks can be used to increase storage capacity" (Col. 18 Lines 20-31). Thus, the queues of Fig. 35 are reasonably assumed to be persistent memory. Further, "messages are received temporarily by the RRM 373 and sent to other event managers" (Col. 31 Lines 13-59) wherein, for example, "RRM 373 controls the interfacing of the bonus server 370 over the network to the remainder of the bonus promotion system 350. RRM 373 sends and receives data packets over the network via a socket connection 371. Incoming data packets are temporarily stored in a message queue 372. ... the data packet is initially placed in the message queue 372 by the socket connection 371 and subsequently forwarded by RRM 373 to a packet decode module 374." (Col. 31 Lines 13-27).

Appellant argues that Acres fails to disclose the use of persistent data storage to include offline storage to store messages until the intended receiver has an opportunity to receive it. Acres provides off-line storage (Col. 50 Lines 5-20). Applicant argues features which are not recited in the claim. As broadly drafted, Acres reasonably provides storage for messages followed by subsequent transmission to first and second application queues.

Thus, for all the reasons provided above, the rejection of the claims is maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Paul A. D'Agostino/ Examiner, Art Unit 3714

Conferees:

/Dmitry Suhol/ Supervisory Patent Examiner, Art Unit 3714

> /Janet C. Baxter/ TC 3700 TQAS